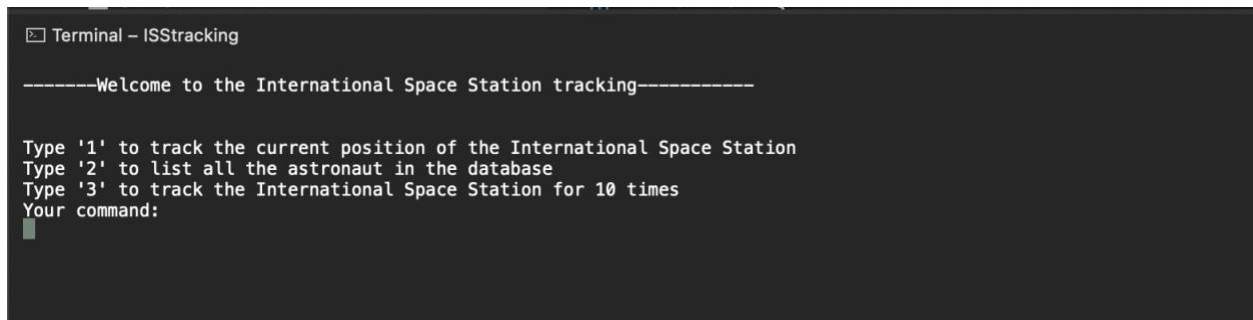


Documentation For Custom Project 6.4D

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This program will keep track the position of the International Space Station from NASA. By using OOP concepts such as inheritance, and polymorphism, the program will perform as a Console Application by taking user command from the terminal.

The picture below will show how does the program work at the beginning

A screenshot of a macOS terminal window titled "Terminal - ISStracking". The terminal displays a welcome message: "-----Welcome to the International Space Station tracking-----". Below this, it lists three instructions: "Type '1' to track the current position of the International Space Station", "Type '2' to list all the astronaut in the database", and "Type '3' to track the International Space Station for 10 times". It then prompts "Your command:" with a cursor on the next line.

```
Terminal - ISStracking

-----Welcome to the International Space Station tracking-----

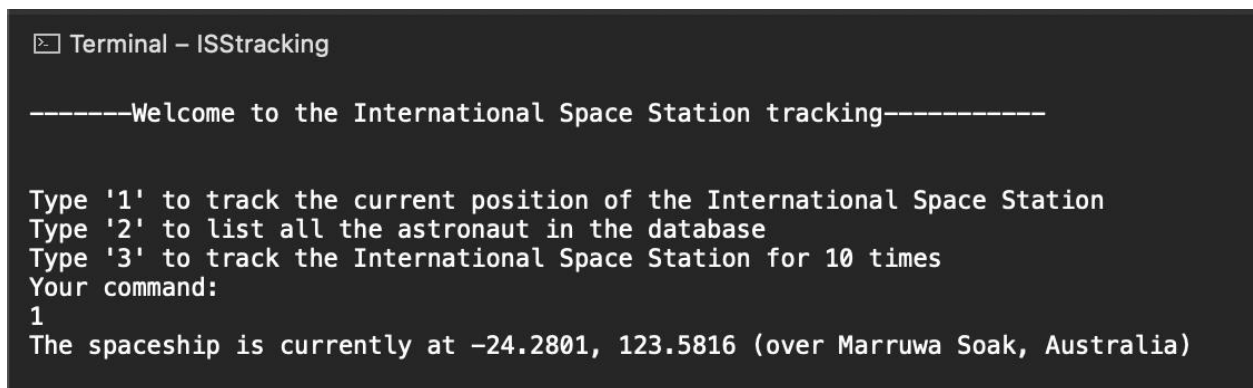
Type '1' to track the current position of the International Space Station
Type '2' to list all the astronaut in the database
Type '3' to track the International Space Station for 10 times
Your command:
█
```

Captured from my Mac on July 28th, 2022

User will have 4 options:

1. Type '1' to get the current position of the ISS
2. Type '2' to get all the astronauts from the database
3. Type '3' to keep track of the ISS position for 10 times
4. Otherwise, the program will return "Do not understand the command"

When the user type '1', the program will perform as picture below

A screenshot of a macOS terminal window titled "Terminal - ISStracking". It shows the same welcome message and instructions as the previous screenshot. After the "Your command:" prompt, the user has entered "1". The program's response is: "The spaceship is currently at -24.2801, 123.5816 (over Marruwa Soak, Australia)".

```
Terminal - ISStracking

-----Welcome to the International Space Station tracking-----

Type '1' to track the current position of the International Space Station
Type '2' to list all the astronaut in the database
Type '3' to track the International Space Station for 10 times
Your command:
1
The spaceship is currently at -24.2801, 123.5816 (over Marruwa Soak, Australia)
```

Captured from my Mac on July 28th, 2022

When the user type '2', the program will perform as picture below

```
Terminal - ISStracking

-----Welcome to the International Space Station tracking-----

Type '1' to track the current position of the International Space Station
Type '2' to list all the astronaut in the database
Type '3' to track the International Space Station for 10 times
Your command:
2
Name: Oleg Artemyev. The astronaut is in ISS
Name: Denis Matveev. The astronaut is in ISS
Name: Sergey Korsakov. The astronaut is in ISS
Name: Kjell Lindgren. The astronaut is in ISS
Name: Bob Hines. The astronaut is in ISS
Name: Samantha Cristoforetti. The astronaut is in ISS
Name: Jessica Watkins. The astronaut is in ISS
Name: Cai Xuzhe. The astronaut is in Tiangong
Name: Chen Dong. The astronaut is in Tiangong
Name: Liu Yang. The astronaut is in Tiangong
```

Captured from my Mac on July 28th, 2022

When the user type '3', the program will perform as picture below

```
Terminal - ISStracking

-----Welcome to the International Space Station tracking-----

Type '1' to track the current position of the International Space Station
Type '2' to list all the astronaut in the database
Type '3' to track the International Space Station for 10 times
Your command:
3
The spaceship is currently at 46.2975, -124.4845 (over Astoria Canyon, )
The spaceship is currently at 46.1542, -124.0845 (over Columbia River Lightship (historical), United States)
The spaceship is currently at 46.0820, -123.8855 (over Cullaby Lake, United States)
The spaceship is currently at 45.9804, -123.6079 (over Tidewater Summit, United States)
The spaceship is currently at 45.9073, -123.4102 (over Buster Camp, United States)
The spaceship is currently at 45.8339, -123.2131 (over McPherson (historical), United States)
The spaceship is currently at 45.7600, -123.0165 (over Buck Mountain, United States)
The spaceship is currently at 45.6710, -122.7813 (over Morgan Channel, United States)
The spaceship is currently at 45.5963, -122.5859 (over Airport Bar, United States)
The spaceship is currently at 45.5363, -122.4300 (over Marilyn's City Park, United States)
```

Captured from my Mac on July 28th, 2022